Commonwealth of Kentucky

Natural Resources and Environmental Protection Cabinet Department for Environmental Protection

Division for Air Quality 803 Schenkel Lane

Frankfort, Kentucky 40601 (502) 573-3382

Title V AIR QUALITY PERMIT Issued under 401 KAR 52:020

Permittee Name: Kingsford Manufacturing Company Mailing Address: P.O. Box 487, Burnside KY 42519

Source Name: Kingsford Manufacturing Company
Mailing Address: P.O. Box 487, Burnside KY 42519

Source Location: 9500 South Highway 27, Burnside, KY 42519

Permit Number: V-03-018 R1

Log Number: 56021

Review Type: Operating/Construction, TV/PSD

Source ID #: 21-199-00018

Regional Office: London Regional Office

875 S. Main Street London, KY 40741 (606) 878-0157

County: Pulaski

Issuance Date: November 4, 2003

Revision Date:

Expiration Date: November 4, 2008

John S. Lyons, Director Division for Air Quality

TABLE OF CONTENTS

| SECTION | DATE OF ISSUANCE | PAGE |
|---|---------------------|------|
| A. PERMIT AUTHORIZATION | | 1 |
| B. EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS | | 2 |
| C. INSIGNIFICANT ACTIVITIES | | 35 |
| D. SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS | | 39 |
| E. SOURCE CONTROL EQUIPMENT OPERATING REQUIREMENTS | | 40 |
| F. MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS | | 41 |
| G. GENERAL PROVISIONS | | 44 |
| H. ALTERNATE OPERATING SCENARIOS | | 50 |
| I. COMPLIANCE SCHEDULE | | 50 |

| Permit type | Log # | Complete | Issuance | Summary of |
|-------------------------------|--------|----------|----------|----------------------------------|
| | | Date | Date | Action |
| | | | | Construct Solvent Treated |
| F-98-013 | F419 | 3/31/98 | 6/9/98 | Briquet (STB) Production Line |
| PSD | | | | PSD for VOCs for Dryers and |
| Construction/Operating | | | | STB Production Line w/ACC |
| | | | | control |
| V-03-018 | F937/5 | | | Facility |
| Operating, TV/PSD | 0732 | 6/10/97 | 11/4/03 | Title V Operating Permit |
| | | | | Increase Total Capacity, |
| V-03-018 R1 Draft | | | | Replacement of Briquet Dryer |
| Operating/Construction | 56021 | 12/01/03 | | A, Addition of new Cooler A, and |
| TV/PSD | | | | Replacement of Rotary |
| | | | | Wood Dryer |

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>1</u> of <u>50</u>

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and received a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>2</u> of <u>50</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 01 (01) Wood receipt and storage

Description:

Operating rate: 337,260 tons of dry wood/year

Construction commenced: 1960

APPLICABLE REGULATIONS:

401 KAR 63:010, Fugitive Emissions

401 KAR 51:017, Prevention of significant deterioration of air quality (BACT for PM and PM₁₀)

1. **Operating Limitations:**

- a) Pursuant to 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the use of water sprays or other measures to suppress the dust emissions during handling.
- b) Pursuant to 401 KAR 51:017, best available control technology (BACT) for particulate matter (PM) and for particulate matter less than 10 microns (PM $_{10}$) shall be applied by the source to minimize fugitive dust emissions.
- c) Pursuant to 401 KAR 51:017, the permittee shall limit the throughput of the amount of dry wood received such that the maximum annual total (12-month rolling average) does not exceed 337,260 tons per year.

Compliance Demonstration Method:

Compliance with operating limitations to suppress and minimize fugitive dust emissions will be demonstrated by dust suppression during wood truck unloading, and good operating practices during material handling.

For compliance with the throughput of dry wood received limit, see Subsection 4, Specific Monitoring Requirements, and Subsection 5, Specific Recordkeeping Requirements.

2. Emission Limitations:

Pursuant to 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

Compliance Demonstration Method:

Permit Number: V-03-018 (Revision 1) Page: 3 of 50

For compliance with the emission limitation, see Subsection 1, Operating Limitations.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements:

None

4. **Specific Monitoring Requirements:**

The permittee shall monitor the amount of wood received and processed on a monthly basis.

5. **Specific Recordkeeping Requirements:**

Records of wet wood received and dry wood processed shall be maintained on a monthly basis.

6. Specific Reporting Requirements:

See Section F, Conditions 5, 6, 7, and 8.

7. Specific Control Equipment Operating Conditions:

None

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>4</u> of <u>50</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit 02 (02, pt 8) Wood Dryer and Retort Furnace with After Combustion Chamber

(ACC)

Description:

Operating rate: 77 tons of wet wood/hour to dryer and 38.5 tons of dry wood/hour to furnace

Construction began: Retort furnace installed 1969, proposed modification (increased capacity)

Proposed new rotary wood dryer in 2004

Control Equipment: 2 cyclones in parallel for wood dryer, 4 cyclones for furnace (2 lines of 2 in series),

and gas streams from the cyclones are combined in the ACC.

Auxiliary Burner: 55 mmBtu/hr fuel oil burner

APPLICABLE REGULATIONS:

401 KAR 59:010 New process operations applicable to emission units commenced on or after July

2, 1975.

401 KAR 51:017 Prevention of significant deterioration of air quality - BACT for nitrogen oxides

(NO_x), sulfur dioxide (SO₂), PM, PM₁₀ and volatile organic compounds (VOC)

40 CFR 64 Compliance Assurance Monitoring (for PM)

1. **Operating Limitations:**

a) Pursuant to 401 KAR 51:017, under normal operating conditions, the following operating conditions shall apply:

- 1) The wet wood dryer and retort furnace shall be operated with a maximum of 80% of emissions going out the ACC stack and a minimum of 20% of emissions to the briquet dryers and waste heat boiler (EU-07, EU-08, EU-09, and EU-10);
- 2) The two cyclones for the wood dryer, the four cyclones for the retort furnace, and the ACC for the combined gas stream shall be operating, and the ACC combustion chamber operating temperature shall remain above 1400?F on a 3-hour rolling average;
- 3) Immediate corrective actions shall be taken whenever the 3-hour average operating temperature of the ACC combustion chamber falls below 1400?F, or the temperature of the two thermocouple readings in the ACC combustion chamber are not within plus/minus 100?F of each other:
- 4) The permittee shall limit the throughput of wet wood to the dryer, such that the maximum rate does not exceed 77 tons/hr:
- 5) The permittee shall limit the throughput of dry wood to the retort furnace, such that the maximum rate does not exceed 38.5 tons/hr;
- 6) The ACC briquet heat supply guillotine-style damper shall be open;

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>5</u> of <u>50</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

1. **Operating Limitations (Continued):**

- 7) The briquet heat supply fan shall be operating;
- 8) The auxiliary briquet heat burner shall not be operating; and
- 9) Dryers A, B, and C shall be operating.
- b) Pursuant to 401 KAR 51:017, under circumstances when 20% of the total flow of emissions cannot be diverted to the briquet dryers (greater than 80% of total flow out the ACC stack), the following operating conditions shall apply:
 - 1) The permittee shall limit the throughput of wet wood to the dryer, such that the maximum rate does not exceed 62.6 tons/hr; and
 - 2) The permittee shall limit the throughput of dry wood to the retort furnace, such that the maximum rate does not exceed 31.3 tons/hr.
- c) Pursuant to 401 KAR 51:017, under circumstances when fuel oil is burned as the auxiliary fuel in the 55 mmBtu burner, fuel oil shall contain less than 0.1% weight sulfur, as certified by the vendor.

Compliance Demonstration Method:

For compliance with the maximum percentage of emissions out the ACC stack operating limit for normal conditions, temperature operating conditions, and all wood throughput limits, see Subsection 3, Testing Requirements for flowrate of ACC gases, Subsection 4, Specific Monitoring Requirements, and Subsection 5, Specific Recordkeeping Requirements.

Hourly production throughput = [Total daily amount processed] / [number of hours of operation that day]

For compliance with the sulfur limit in the fuel oil, see Subsection 4, Specific Monitoring Requirements, and Subsection 5, Specific Recordkeeping Requirements.

2. Emission Limitations:

- a) Pursuant to 401 KAR 59:010, Section 3(1)(a), visible emissions from any stack shall not equal or exceed twenty (20) percent opacity based on a six-minute average.
- b) Pursuant to 401 KAR 51:017, under normal operating conditions with no more than 80% of the emissions going out the ACC stack, emissions into the open air from the ACC stack shall not

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>6</u> of <u>50</u>

exceed the following limits:

1) 60.60 lbs/hr of PM

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. <u>Emission Limitations (Continued)</u>:

h)

- 2) 48.48 lbs/hr of PM₁₀
- 3) 92.71 lbs/hr of NO_x
- 4) 24.24 lbs/hr of SO₂
- 5) 7.13 lbs/hr of VOC
- c) Pursuant to 401 KAR 59:010, under operating conditions with greater than 80% of the emissions going out the ACC stack, the process rate shall be limited so that the particulate matter emissions into the open air shall not exceed:

Combined Allowable Rate of Emission in lb of PM/hr = $17.31(P_1)^{0.16} + 17.31(P_2)^{0.16}$ Maximum = 63.02 lb PM/hr

where the max $P_1 = 62.6 - (0.1)(62.6) = 56.34$, assuming 10% uncombined moisture in wet wood and the max $P_2 = 31.3$, from the combined emissions in the ACC unit.

Compliance Demonstration Method:

- a) For compliance with the visible emissions limit, see Subsection 3, Testing Requirements and Subsection 4, Specific Monitoring Requirements.
- b) For compliance with the emission limits under normal operating conditions, compliance will be assumed from the BACT analysis until site testing of the ACC stack, see Subsection 3, Testing Requirements. Emission factors derived from stack testing shall be used to calculate future emissions.
- c) For compliance with the PM emission limitation under operating conditions with greater than 80 % of the emissions going out the ACC stack, compliance will be assumed from the operating conditions under Subsection 1.b), Operating Conditions, and the BACT analysis, until new information is gathered from the ACC stack test, see Subsection 3, Testing Requirements. Emission factors derived from stack testing shall be used to calculate future emissions.

3. Testing Requirements:

- a) Pursuant to 401 KAR 59:010, the permittee shall determine the opacity of emissions from each stack by EPA Reference Method 9 annually, or more frequently if requested by the Division.
- b) Referring to Section G(d)5 and after modifications are made to Emission Unit 02, the following

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>7</u> of <u>50</u>

performance tests shall be performed within 60 days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of the unit.

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>8</u> of <u>50</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements (Continued):

b) Continued

- 1) EPA Reference Method 2A or equivalent shall be performed to determine the flowrate of ACC gases. One test shall be performed under conditions with 100% of emissions going out the ACC stack. One test shall be performed under normal operating conditions as described in Subsection 1.a), Operating Limitations for normal operations. The percent of ACC gases that are ducted to the dryers under normal operations shall be calculated and reported with the test results.
- 2) EPA Reference Method 5 or equivalent shall be performed to determine the combined amount of PM emissions per ton of dry wood processed through the wet wood dryer and the retort furnace. The test shall be performed during normal operations as described in Subsection 1.a), Operating Limitations for normal operations.
- 3) EPA Reference Method 7 or equivalent shall be performed to determine the amount of NO_x emissions per ton of dry wood processed through the wet wood dryer and the retort furnace. The test shall be performed during normal operations as described in Subsection 1.a), Operating Limitations for normal operations.
- 4) EPA Reference Method 18, Method 25A, or equivalent shall be performed to determine the amount of VOC emissions per ton of dry wood processed through the we wood dryer and the retort furnace. The test shall be performed during normal operations as described in Subsection 1.a), Operating Limitations for normal operations.
- 5) EPA Reference Method 201 and 202 or equivalent shall be performed to determine the amount of PM₁₀ emissions per ton of dry wood processed through the wet wood dryer and the retort furnace. The test shall be performed during normal operations as described in Subsection 1.a), Operating Limitations for normal operations.
- 6) EPA Reference Method 6 or equivalent shall be performed to determine the amount of SO₂ emissions per ton of dry wood processed through the wet wood dryer and the retort furnace. The test shall be performed during normal operations as described in Subsection 1.a), Operating Limitations for normal operations.

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>9</u> of <u>50</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. **Specific Monitoring Requirements:**

Pursuant to 40 CFR 64, the permittee shall provide reasonable assurance of compliance with emission limitations or standards for the anticipated range of operations including the following:

- a) The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.
- b) The permittee shall monitor the wood processing rate and hours of operation on a daily basis.
- c) The permittee shall monitor the ACC combustion temperature from a thermocouple located in a representative location in the ACC combustion chamber every second. The temperature and a 15-minute average temperature shall be displayed on a screen in the control room. A 3-hour rolling average temperature shall be calculated.
- d) The permittee shall monitor the ACC combustion temperature from a second thermocouple located in a representative location in the ACC combustion chamber weekly.
- e) The permittee shall monitor the weight percent of sulfur in each shipment of fuel oil combusted.

5. **Specific Recordkeeping Requirements:**

The permittee shall maintain records of the following:

- Weekly logs of qualitative visual observation of the opacity of emissions from the ACC stack, any Method 9 testing results, and any repairs that were made due to any opacity reading which exceeded the standard;
- b) The wood material processed and hours of operation on a daily basis;
- c) Average ACC combustion temperatures will be recorded every 15 minutes. The calculated 3-hour rolling average temperature shall be recorded. The data will be retained for a minimum of 5 years.
- d) The weight percent of sulfur in each shipment of fuel oil combusted.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>10</u> of <u>50</u>

Specific Reporting Requirements:

See Section F, Conditions 5, 6, 7, and 8.

7. Specific Control Equipment Operating Conditions:

The control equipment shall be operated and maintained in accordance with the manufacturer's specifications and/or standard operating procedures. Periodic maintenance of the control equipment, including associated ductwork, shall be performed as needed in order to insure proper operation of the equipment. A planned shutdown of the retort and char production process shall be scheduled as necessary for this maintenance activity. Good air pollution control practice for minimizing emissions associated with these planned maintenance activities shall be followed pursuant to 401 KAR 50:055, Section 2, pending resumption of the retort and char production process following return of the control equipment to operation.

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>11</u> of <u>50</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit 03 (04, pts 23, 24) Briquet Cooler B

Description:

Operating rate: 7 tons of dry briquets/hour Construction commenced: June 1973 Two exhaust stacks for the unit

APPLICABLE REGULATIONS:

401 KAR 61:020, Existing process operations applicable to emission units commenced before July 2, 1975.

1. **Operating Limitations:**

NA

2. <u>Emission Limitations</u>:

- a) Pursuant to 401 KAR 61:020, particulate matter emissions into the open air shall not exceed [4.10(P)^{0.67}] lbs/hour based on a three-hour average where P is the processing rate in tons per hour.
- b) Pursuant to 401 KAR 61:020, Section 3(1)(a), visible emissions from any stack shall not equal or exceed forty (40) percent opacity based on a six-minute average.

Compliance Demonstration Method:

- a) For compliance with the PM emission limit, an emission factor of 0.48 lbs PM/ton of dry briquets shall be used, based on the 1995 stack test, until new information is gathered from the unit stack tests that shall be performed within 6 months from issuance of V-03-018 R1. Emission factors derived from stack testing are to replace the emission factor currently listed in the permit, and shall be used to calculate future emissions.
- b) For compliance with visible emissions limit, see Subsection 3, Testing Requirements and Subsection 4, Specific Monitoring Requirements.

3. Testing Requirements:

a) Pursuant to 401 KAR 59:010, the permittee shall determine the opacity of emissions from each stack by EPA Reference Method 9 annually, or more frequently if requested by the Division.

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>12</u> of <u>50</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Testing Requirements (Continued):

b) EPA Reference Method 5 or equivalent shall be performed within 6 months from issuance of V-03-018 R1 to determine the amount of PM emissions per ton of dry briquets processed through the unit for each stack of the unit.

4. **Specific Monitoring Requirements:**

- a) The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for any necessary repairs.
- b) The permittee shall monitor the dry briquet processing rate and hours of operation on a daily basis.

5. <u>Specific Recordkeeping Requirements</u>:

Records of dry briquets processed and hours of operation on a daily basis shall be maintained.

6. Specific Reporting Requirements:

See Section F, Conditions 5, 6, 7, and 8.

7. Specific Control Equipment Operating Conditions:

NA

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>13</u> of <u>50</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit 04 (04, pts 25, 26, 27) Briquet Cooler C

Description:

Operating rate: 8 tons of dry briquets/hour Construction commenced: June 1989 Three exhaust stacks for the unit

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations applicable to emission units commenced on or after July 2, 1975.

1. **Operating Limitations:**

NA

2. <u>Emission Limitations</u>:

- a) Pursuant to 401 KAR 59:010, Section 3(2), particulate matter emissions into the open air shall not exceed [3.59(P)^{0.62}] lbs/hour based on a three-hour average where P is the processing rate in tons per hour.
- b) Pursuant to 401 KAR 59:010, Section 3(1)(a), visible emissions from any stack shall not equal or exceed twenty (20) percent opacity based on a six-minute average.

Compliance Demonstration Method:

- a) For compliance with the PM emission limit, an emission factor of 0.50 lbs PM/ton of dry briquets shall be used, based on the 1995 stack test, until new information is gathered from the unit stack tests that shall be performed within 6 months from issuance of V-03-018 R1. Emission factors derived from stack testing are to replace the emission factor currently listed in the permit, and shall be used to calculate future emissions.
- b) For compliance with visible emissions limit, see Subsection 3, Testing Requirements and Subsection 4, Specific Monitoring Requirements.

3. Testing Requirements:

a) Pursuant to 401 KAR 59:010, the permittee shall determine the opacity of emissions from each stack by EPA Reference Method 9 annually, or more frequently if requested by the Division.

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>14</u> of <u>50</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Testing Requirements (Continued):

b) EPA Reference Method 5 or equivalent shall be performed within 6 months from issuance of V-03-018 R1 to determine the amount of PM emissions per ton of dry briquets processed through the unit for each stack of the unit.

4. **Specific Monitoring Requirements:**

- a) The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for any necessary repairs.
- b) The permittee shall monitor the dry briquet processing rate and hours of operation on a daily basis.

5. <u>Specific Recordkeeping Requirements</u>:

- a) Records of dry briquets processed and hours of operation on a daily basis shall be maintained.
- b) Records of any repairs that were made due to any opacity reading which exceeded the standard.

6. Specific Reporting Requirements:

See Section F, Conditions 5, 6, 7, and 8.

7. Specific Control Equipment Operating Conditions:

NA

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>15</u> of <u>50</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit 05 (05) Briquet Manufacturing Dust Collector

Description:

Equipment includes: transfer and vibrating conveyors, briquet silos and bypass chutes

Operating rate: 27 tons of dry briquets/hour (proposed increased capacity)

Construction commenced: November 1979, modification proposed

Control Equipment: Filter

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations applicable to emission units commenced on or after July 2, 1975.

1. **Operating Limitations:**

NA

2. <u>Emission Limitations</u>:

- a) Pursuant to 401 KAR 59:010, Section 3(2), particulate matter emissions into the open air shall not exceed [3.59(P)^{0.62}] lbs/hour based on a three-hour average where P is the processing rate in tons per hour.
- b) Pursuant to 401 KAR 59:010, Section 3(1)(a), visible emissions from any stack shall not equal or exceed twenty (20) percent opacity based on a six-minute average.

Compliance Demonstration Method:

- a) For compliance with the PM emission limit, see Subsection 7, Specific Control Equipment Operating Conditions.
- b) For compliance with visible emissions limit, see Subsection 3, Testing Requirements and Subsection 4, Specific Monitoring Requirements.

3. Testing Requirements:

Pursuant to 401 KAR 59:010, the permittee shall determine the opacity of emissions from each stack by EPA Reference Method 9 annually, or more frequently if requested by the Division.

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>16</u> of <u>50</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. **Specific Monitoring Requirements:**

- a) The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for any necessary repairs.
- b) The permittee shall monitor the dry briquet processing rate and hours of operation on a daily basis.

5. <u>Specific Recordkeeping Requirements</u>:

- a) Records of dry briquets processed and hours of operation on a daily basis shall be maintained.
- b) Records of any repairs that were made due to any opacity reading that exceeded the standard.

Specific Reporting Requirements:

See Section F, Conditions 5, 6, 7, and 8.

7. Specific Control Equipment Operating Conditions:

- a) The filter shall be installed and maintained in accordance with manufacturer's specifications and/or standard operating procedures at all times equipment is operating.
- b) Records regarding the maintenance of the filter shall be maintained.
- c) See Section E.

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>17</u> of <u>50</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit 06 (06) Briquet Packaging and Bagging Dust Collector

Description:

Operating rate: 30 tons of dry briquets/hour Construction commenced: May 1985

Control Equipment: Filter

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations applicable to emission units commenced on or after July 2, 1975

1. **Operating Limitations:**

NA

2. <u>Emission Limitations</u>:

- a) Pursuant to 401 KAR 59:010, Section 3(2), particulate matter emissions into the open air shall not exceed [3.59(P)^{0.62}] lbs/hour based on a three-hour average where P is the processing rate in tons per hour.
- b) Pursuant to 401 KAR 59:010, Section 3(1)(a), visible emissions from any stack shall not equal or exceed twenty (20) percent opacity based on a six-minute average.

Compliance Demonstration Method:

- a) For compliance with the PM emission limit, see Subsection 7, Specific Control Equipment Operating Conditions.
- b) For compliance with visible emissions limit, see Subsection 3, Testing Requirements and Subsection 4, Specific Monitoring Requirements.

3. <u>Testing Requirements</u>:

Pursuant to 401 KAR 59:010, the permittee shall determine the opacity of emissions from each stack by EPA Reference Method 9 annually, or more frequently if requested by the Division.

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>18</u> of <u>50</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. **Specific Monitoring Requirements:**

- a) The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for any necessary repairs.
- b) The permittee shall monitor the dry briquet processing rate and hours of operation on a daily basis.

5. <u>Specific Recordkeeping Requirements</u>:

- a) Records of dry briquets processed and hours of operation on a daily basis shall be maintained.
- b) Records of any repairs that were made due to any opacity reading that exceeded the standard.

Specific Reporting Requirements:

See Section F, Conditions 5, 6, 7, and 8.

7. Specific Control Equipment Operating Conditions:

- a) The filter shall be installed and maintained in accordance with manufacturer's specifications and/or standard operating procedures at all times equipment is operating.
- b) Records regarding the maintenance of the filter shall be maintained.
- c) See Section E.

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>19</u> of <u>50</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit 07 (02, pts 1, 2) Briquet Dryer A

Description:

Operating rate: 12 tons of dry briquets/hour

Construction commenced: New proposed briquet dryer (replacement of existing unit)

One exhaust stack for the proposed dryer

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations applicable to emission units commenced on or after July 2, 1975.

401 KAR 51:017, Prevention of significant deterioration of air quality (BACT for PM, PM₁₀, and VOC).

1. **Operating Limitations:**

Pursuant to 401 KAR 51:017, the permittee shall limit the throughput of dry briquets to the briquet dryer, such that the maximum rate does not exceed 12 tons/hr.

Compliance Demonstration Method:

For compliance with the throughput of dry briquets operating limit, see Subsection 4, Specific Monitoring Requirements, and Subsection 5, Specific Recordkeeping Requirements.

Hourly production throughput = [Total daily amount processed] / [number of operating hours that day]

2. <u>Emission Limitations</u>:

- a) Pursuant to 401 KAR 59:010, Section 3(1)(a), visible emissions from any stack shall not equal or exceed twenty (20) percent opacity based on a six-minute average.
- b) Pursuant to 401 KAR 51:017, emission limit for VOC, see Section D, Condition 3.
- c) Pursuant to 401 KAR 51:017, PM emission shall not exceed 6.00 lbs/hr.
- d) Pursuant to 401 KAR 51:017, PM_{10} emission shall not exceed 3.60 lbs/hr.

Compliance Demonstration Method:

a) For compliance with visible emissions limit, see Subsection 3, Testing Requirements and Subsection 4, Specific Monitoring Requirements.

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>20</u> of <u>50</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. <u>Emission Limitations (Continued)</u>:

Compliance Demonstration Method (Continued):

- b) For compliance with the VOC emission limit, see Section D, Condition 3.
- c) For compliance with the PM emission limit, an emission factor of 0.50 lbs PM/ton of dry briquets shall be used, based on the BACT analysis, until new information is gathered from the unit stack tests that shall be performed within 6 months from issuance of V-03-018 R1. Emission factors derived from stack testing are to replace the emission factor currently listed in the permit, and shall be used to calculate future emissions.
- d) For compliance with the PM₁₀ emission limit, an emission factor of 0.30 lbs PM/ton of dry briquets shall be used, based on the BACT analysis, until new information is gathered from the unit stack tests that shall be performed within 6 months from issuance of V-03-018 R1. Emission factors derived from stack testing are to replace the emission factor currently listed in the permit, and shall be used to calculate future emissions.

Actual emission rate = [prorated daily dry briquet production total through unit (tons/day)] x [emission factor (lbs PM/ton of dry briquets) / [hours of operation that day (hrs/day)]

Prorated daily dry briquet production total through emission unit EU-07 (tons/day) = the total daily processing rate through emission units EU-07, EU-08, and EU-09 (tons/day) x [12 (tons/hr) x EU-07 (hrs/day)] / [12 (tons/hr) x EU-07 (hrs/day) + 7 (tons/hr) x EU-08 (hrs/day) + 8 (tons/hr) x EU-09 (hrs/day)]

3. <u>Testing Requirements</u>:

- a) Pursuant to 401 KAR 59:010, the permittee shall determine the opacity of emissions from each stack by EPA Reference Method 9 annually, or more frequently if requested by the division.
- b) EPA Reference Method 5 or equivalent shall be performed within 6 months from issuance of V-03-018 R1 to determine the amount of PM emissions per ton of dry briquets processed through the unit.
- c) EPA Reference Method 201 and 202 or equivalent shall be performed within 6 months from issuance of V-03-018 R1 to determine the amount of PM_{10} emissions per ton of dry briquets processed through the unit.

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>21</u> of <u>50</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. **Specific Monitoring Requirements:**

- a) The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for any necessary repairs.
- b) The permittee shall monitor the hours of operation for emission unit EU-07 on a daily basis and monitor the total tons of dry briquets process on a daily basis (sum of emission units EU-07, EU-08, and EU-09).

5. Specific Recordkeeping Requirements:

- a) Records of dry briquets processed and hours of operation on a daily basis shall be maintained.
- b) Records of any repairs that were made due to any opacity reading, which exceeded the standard.

Specific Reporting Requirements:

See Section F, Conditions 5, 6, 7, and 8.

7. Specific Control Equipment Operating Conditions:

NA

8. Compliance Certification Requirements:

See Section F.

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>22</u> of <u>50</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit 08 (02, pts 3, 4) Briquet Dryer B

Description:

Operating rate: 7 tons of dry briquets/hour Construction commenced: June 1973 Two exhaust stacks for the unit

APPLICABLE REGULATIONS:

401 KAR 61:020, Existing process operations applicable to emission units commenced before July 2, 1975.

401 KAR 51:017, Prevention of significant deterioration of air quality (BACT for VOC).

1. **Operating Limitations:**

NA

2. <u>Emission Limitations</u>:

- a) Pursuant to 401 KAR 61:020, Section 3(2), particulate matter emissions into the open air shall not exceed [4.10(P)^{0.67}] lbs/hour based on a three-hour average where P is the processing rate in tons per hour.
- b) Pursuant to 401 KAR 61:020, Section 3(1)(a), visible emissions from any stack shall not equal or exceed forty (40) percent opacity based on a six-minute average.
- c) Pursuant to 401 KAR 51:017, emission limit for VOC, see Section D, Condition 3.

Compliance Demonstration Method:

- a) For compliance with the PM emission limit, an emission factor of 0.64 lbs PM/ton of dry briquets shall be used, based on the 1995 stack test, until new information is gathered from the unit stack tests that shall be performed within 6 months from issuance of V-03-018 R1. Emission factors derived from stack testing are to replace the emission factor currently listed in the permit, and shall be used to calculate future emissions.
- b) For compliance with visible emissions limit, see Subsection 3, Testing Requirements and Subsection 4, Specific Monitoring Requirements.
- c) For compliance with the VOC emission limit, see Section D, Condition 3.

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>23</u> of <u>50</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. <u>Testing Requirements</u>:

- a) Pursuant to 401 KAR 61:020, the permittee shall determine the opacity of emissions from each stack by EPA Reference Method 9 annually, or more frequently if requested by the Division.
- b) EPA Reference Method 5 or equivalent shall be performed within 6 months from issuance of V-03-018 R1 to determine the amount of PM emissions per ton of dry briquets processed through the unit for each stack of the unit.

4. Specific Monitoring Requirements:

- a) The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then and an inspection shall be initiated of control equipment for any necessary repairs.
- b) The permittee shall monitor the hours of operation for emission unit EU-08 on a daily basis and monitor the total tons of dry briquets process on a daily basis (sum of emission units EU-07, EU-08, and EU-09).

5. Specific Recordkeeping Requirements:

- a) Records of dry briquets processed and hours of operation on a daily basis shall be maintained.
- b) Records of any repairs that were made due to any opacity reading, which exceeded the standard.

6. **Specific Reporting Requirements:**

See Section F, Conditions 5, 6, 7, and 8.

7. Specific Control Equipment Operating Conditions:

NA

8. <u>Compliance Certification Requirements:</u>

See Section F.

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>24</u> of <u>50</u>

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>25</u> of <u>50</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit 09 (02, pts 5,6) Briquet Dryer C

Description:

Operating rate: 8 tons of dry briquets/hour Construction commenced: June 1989 Two exhaust stacks for the unit

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations applicable to emission units commenced on of after July 2, 1975.

401 KAR 51:017, Prevention of significant deterioration of air quality (BACT for VOC).

1. **Operating Limitations:**

NA

2. <u>Emission Limitations</u>:

- a) Pursuant to 401 KAR 59:010, Section 3(2), particulate matter emissions into the open air shall not exceed [3.59(P)^{0.62}] lbs/hour based on a three-hour average where P is the processing rate in tons per hour.
- b) Pursuant to 401 KAR 59:010, Section 3(1)(a), visible emissions from any stack shall not equal or exceed twenty (20) percent opacity based on a six-minute average.
- c) Pursuant to 401 KAR 51:017, emission limit for VOC, see Section D, Condition 3.

Compliance Demonstration Method:

- a) For compliance with the PM emission limit, an emission factor of 0.40 lbs PM/ton of dry briquets shall be used, based on the 1995 stack test, until new information is gathered from the unit stack tests that shall be performed within 6 months from issuance of V-03-018 R1. Emission factors derived from stack testing are to replace the emission factor currently listed in the permit, and shall be used to calculate future emissions.
- b) For compliance with visible emissions limit, see Subsection 3, Testing Requirements and Subsection 4, Specific Monitoring Requirements.
- c) For compliance with the VOC emission limit, see Section D, Condition 3.

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>26</u> of <u>50</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements:

- a) Pursuant to 401 KAR 59:010, the permittee shall determine the opacity of emissions from each stack by EPA Reference Method 9 annually, or more frequently if requested by the Division.
- b) EPA Reference Method 5 or equivalent shall be performed within 6 months from issuance of V-03-018 R1 to determine the amount of PM emissions per ton of dry briquets processed through the unit for each stack of the unit.

4. **Specific Monitoring Requirements:**

- a) The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for any necessary repairs.
- b) The permittee shall monitor the hours of operation for emission unit EU-09 on a daily basis and monitor the total tons of dry briquets process on a daily basis (sum of emission units EU-07, EU-08, and EU-09).

5. Specific Recordkeeping Requirements:

- a) Records of dry briquets processed and hours of operation on a daily basis shall be maintained.
- b) Records of any repairs that were made due to any opacity reading, which exceeded the standard.

6. Specific Reporting Requirements:

See Section F, Conditions 5, 6, 7, and 8.

7. Specific Control Equipment Operating Conditions:

NA

8. Compliance Certification Requirements:

See Section F.

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>27</u> of <u>50</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit 10 (02, pt 7) Waste Heat Boiler

Description:

Maximum Continuous Rating: 12.6 mmBtu/hr

Construction commenced: 1991

The waste heat boiler influent is from a percentage of the ACC exhaust gases. The exhaust from the waste heat boiler goes through the waste heat boiler stack and operates in one of two modes:

- 1. Waste heat from the ACC stack exhaust with no oil firing in the waste heat boiler; or
- 2. Waste heat from the ACC stack exhaust with firing of distillate fuel oil (0.5% sulfur in oil) in a single 12.6 mmBtu/hr burner in the waste heat boiler.

APPLICABLE REGULATIONS:

401 KAR 59:015, New Indirect heat exchangers, applicable to an emission unit with a capacity of less than 250 mmBtu/hr which commenced on or after April 9, 1972. This regulation only applies when fuel oil is being fired in the waste heat boiler.

401 KAR 60:005, which incorporates by reference the federal regulation 40 CFR 60 Subpart Dc, Standards of performance for small industrial-commercial-institutional steam generating units, applies to each steam generating unit commenced after June 9, 1989 that has a maximum design heat input capacity between 10 mmBtu/hr and 100 mmBtu/hr. This regulation only applies when fuel oil is being fired in the waste heat boiler.

1. **Operating Limitations:**

Pursuant to 40 CFR 60.42c(d), the % sulfur in the fuel oil shall not exceed 0.5%.

2. Emission Limitations:

- a) Pursuant to 401 KAR 59:015, Section 4(1)(c), particulate matter emissions shall not exceed 0.53 lb/mmBtu.
- b) Pursuant to 401 KAR 59:015, Section 4(2), visible emissions from any stack shall not equal or exceed twenty (20) percent opacity based on a six-minute average, except that a maximum of 40% opacity, based on a six-minute average, shall be permissible for not more than 6 consecutive minutes in any consecutive 60 minutes during cleaning the fire-box or blowing soot.
- c) Pursuant to 401 KAR 59:015, Section 5(1), sulfur dioxide emissions shall not exceed 2.73 lb/mmBtu.

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>28</u> of <u>50</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. <u>Emission Limitations (Continued)</u>:

Compliance Demonstration Method:

- a) For compliance with the PM emission limit, an emission factor of 0.014 lbs/mmBtu shall be used, based on AP-42 emission factors.
- b) For compliance with visible emissions limit, see Subsection 3, Testing Requirements and Subsection 4, Specific Monitoring Requirements.
- c) For compliance with the SO₂ emission limit, an emission factor of 0.508 lb/mmBtu shall be used, based on AP-42 emission factors. Fuel certifications shall be maintained, see Subsection 5, Specific Recordkeeping Requirements.

3. Testing Requirements:

Pursuant to 401 KAR 59:015, the permittee shall determine the opacity of emissions from each stack by EPA Reference Method 9 annually, or more frequently if requested by the Division.

4. **Specific Monitoring Requirements:**

- a) The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for any necessary repairs.
- b) The permittee shall monitor the fuel oil usage rate on a monthly basis, pursuant to 40 CFR 60 Subpart Dc and a variance approved by U.S. EPA, and the Division.

5. **Specific Recordkeeping Requirements:**

- a) Records of fuel oil used monthly shall be maintained.
- b) The permittee shall maintain records of the distillate fuel oil supplier certification. Certifications shall contain the name of the oil supplier and a statement from the supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c.
- c) Records of any repairs that were made due to any opacity reading, which exceeded the standard, shall be maintained.

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>29</u> of <u>50</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. **Specific Reporting Requirements:**

- a) The permittee shall submit semi-annual reports (postmarked the 30th day following the end of the reporting period) that shall include fuel supplier certifications specified by 40 CFR 60.48c(f)(1), and a certified statement signed by the owner/operator that the fuel supplier certifications submitted represent all of the fuel oil combusted during that time.
- b) See Section F, Conditions 5, 6, 7, and 8.

7. Specific Control Equipment Operating Conditions:

NA

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>30</u> of <u>50</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit 11 (08) Plant Roads – Paved and Unpaved

Description:

Construction commenced: 1960

APPLICABLE REGULATIONS:

401 KAR 63:010, Fugitive Emissions

1. **Operating Limitations:**

Pursuant to 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:

- a) Application and maintenance of asphalt, oil, water, or suitable chemicals on roads, material stockpiles, and other surfaces which can create airborne dusts;
- b) Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne;
- c) The maintenance of paved roads in a clean condition; and
- d) The prompt removal of earth or other material from a paved street, which earth or other material has been transported thereto by trucking or earth moving equipment or erosion by water.

Compliance will be demonstrated by the good operating procedures listed above, and the permittee shall post a 10 miles per hour sign for each roadway and enforce the speed limit on facility property.

2. Emission Limitations:

Pursuant to 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

Compliance Demonstration Method:

Compliance by good operating procedures, see Subsection 1, Operating Limitations.

3. Testing Requirements:

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>31</u> of <u>50</u>

NA

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. **Specific Monitoring Requirements:**

The permittee shall monitor the amount of raw materials and final products to estimate vehicle miles traveled for use in the AP-42 emission calculations for paved and unpaved roadways.

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the calculations to determine the fugitive emissions from paved and unpaved roads with all data used in the calculations. Records shall be maintained for the current year and the two previous years. Emission calculations shall be based on the most current AP-42 emission factors for paved and unpaved roadways for that year.

Specific Reporting Requirements:

See Section F, Conditions 5, 6, 7, and 8.

7. <u>Specific Control Equipment Operating Conditions</u>:

NA

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>32</u> of <u>50</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit 37 (37) Solvent Treated Briquets (STB) Production Line

Description:

Equipment includes: Conveyor belts, briquet screening, dip tank, and drag chain

Construction commenced: 1998

APPLICABLE REGULATIONS:

401 KAR 51:017 (June 9, 1998 STB construction/operation permit), Prevention of significant deterioration of air quality.

1. **Operating Limitations:**

- a) Pursuant to 401 KAR 51:017, STB production rate shall not exceed 23.3 tons/hour (averaged on a daily basis) and 152,024 tons in any consecutive twelve months period.
- b) Pursuant to 401 KAR 51:017, lighter fluid usage rate shall not exceed 1,014 gallons/hour (averaged on a weekly basis) and 6,630 thousand gallons in any consecutive twelve months period.
- c) The dry briquets shall be screened prior to the application of the solvent to minimize the production of fines saturated with solvent (BACT requirement).
- d) Dry charcoal feeding into the dip tank shall be terminated immediately after discovering an occurrence of an upset of the After Combustion Chamber (ACC) afterburner operation (BACT requirement).
- e) The solvent level in the dip tank shall be maintained at a controlled level during the dipping operation and the dip tank shall be filled to minimize the volatilization of volatile organic compounds (VOC)(BACT requirement).
- f) Except during the initial introduction of briquets into the dip tank, the temperature of the lighter fluid in the dip tank shall not exceed 50 ?F to minimize VOC emissions from the dipping operation (BACT requirement).
- g) Exhaust fumes from the STB dipping operation, the STB building, and STB bagging operations shall be ventilated through a common fume exhaust fan to the ACC afterburner for VOC control (BACT requirement).

2. Emission Limitations:

Pursuant to 401 KAR 51:017, VOC emissions from the ACC afterburner shall not exceed 3.3 lbs/hour and 10.8 tons in any consecutive twelve months period due to the solvent treated briquet line operation.

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>33</u> of <u>50</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. Emission Limitations Continued:

Compliance Demonstration Method:

The permittee may assure compliance with this emission limitation by assuring compliance with the operating limitations under Subsection 1 and assuring proper operation of the ACC afterburner. The proper operation of the ACC afterburner can be assured by meeting the requirements listed under specific control equipment operating conditions under Subsection 7 of this Section.

3. <u>Testing Requirements</u>:

NA

4. **Specific Monitoring Requirements:**

Pursuant to 401 KAR 51:017, the permittee shall monitor the following things:

- a) The amount of STB production on a daily basis;
- b) The amount of lighter fluid usage in the STB production line on a weekly basis;
- c) The hours of operation of the STB production line on a daily basis; and
- e) The temperature of the lighter fluid in the dip tank on an hourly basis.

5. **Specific Recordkeeping Requirements:**

Pursuant to 401 KAR 51:017, the permittee shall maintain records of the following information:

- a) The amount of STB production on a daily basis;
- b) The amount of lighter fluid usage in the STB production line on a weekly basis;
- c) The hours of operation of the STB production line on a daily basis; and
- e) The temperature of the lighter fluid in the dip tank on an hourly basis.

6. Specific Reporting Requirements:

NA

7. Specific Control Equipment Operating Conditions:

- a) Records regarding the upset condition (date and time of occurrence, duration etc.) and maintenance of the ACC afterburner shall be maintained and made available upon request for inspection by any duly authorized representative of the Division for Air Quality.
- b) See Section E for further requirements.

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>34</u> of <u>50</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit 38 (new unit) Briquet Cooler A

Description:

Operating rate: 12 tons of dry briquets/hour Construction commenced: Proposed new unit

One exhaust stacks for the unit

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations applicable to emission units commenced on or after July 2, 1975.

401 KAR 51:017, Prevention of significant deterioration of air quality (BACT for PM and PM₁₀).

1. **Operating Limitations**:

Pursuant to 401 KAR 51:017, the permittee shall limit the throughput of dry briquets to the briquet cooler, such that the maximum rate does not exceed 12 tons/hr.

Compliance Demonstration Method:

For compliance with the throughput of dry briquets operating limit, see Subsection 4, Specific Monitoring Requirements, and Subsection 5, Specific Recordkeeping Requirements.

Hourly production throughput = [Total daily amount processed] / [number of operating hours that day]

2. <u>Emission Limitations</u>:

- a) Pursuant to 401 KAR 59:010, Section 3(1)(a), visible emissions from any stack shall not equal or exceed twenty (20) percent opacity based on a six-minute average.
- b) Pursuant to 401 KAR 51:017, PM emission shall not exceed 6.00 lbs/hr.
- c) Pursuant to 401 KAR 51:017, PM₁₀ emission shall not exceed 3.60 lbs/hr.

Compliance Demonstration Method:

- a) For compliance with visible emissions limit, see Subsection 3, Testing Requirements and Subsection 4, Specific Monitoring Requirements.
- b) For compliance with the PM emission limit, an emission factor of 0.50 lbs PM/ton of dry briquets shall be used, based on the BACT analysis, until new information is gathered from the

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>35</u> of <u>50</u>

unit stack tests that shall be performed within 6 months from issuance of V-03-018 R1. Emission factors derived from stack testing are to replace the emission factor currently listed in the permit, and shall be used to calculate future emissions.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. Emission Limitations (Continued):

Compliance Demonstration Method (Continued):

d) For compliance with the PM₁₀ emission limit, an emission factor of 0.30 lbs PM/ton of dry briquets shall be used, based on the BACT analysis, until new information is gathered from the unit stack tests that shall be performed within 6 months from issuance of V-03-018 R1. Emission factors derived from stack testing are to replace the emission factor currently listed in the permit, and shall be used to calculate future emissions.

Actual emission rate = [prorated daily dry briquet production total through unit (tons/day)] x [emission factor (lbs PM/ton of dry briquets) / [hours of operation that day (hrs/day)]

Prorated daily dry briquet production total through emission unit EU-38 (tons/day) = Prorated daily dry briquet production total through emission unit EU-07 (tons/day)

3. Testing Requirements:

- a) Pursuant to 401 KAR 59:010, the permittee shall determine the opacity of emissions from each stack by EPA Reference Method 9 annually, or more frequently if requested by the division.
- b) EPA Reference Method 5 or equivalent shall be performed within 6 months from issuance of V-03-018 R1 to determine the amount of PM emissions per ton of dry briquets processed through the unit.
- c) EPA Reference Method 201 and 202 or equivalent shall be performed within 6 months from issuance of V-03-018 R1 to determine the amount of PM₁₀ emissions per ton of dry briquets processed through the unit.

4. Specific Monitoring Requirements:

- a) The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for any necessary repairs.
- b) The permittee shall monitor the dry briquet processing rate and hours of operation on a daily basis.

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>36</u> of <u>50</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

- a) Records of dry briquets processed and hours of operation on a daily basis shall be maintained.
- b) Records of any repairs that were made due to any opacity reading which exceeded the standard.

6. **Specific Reporting Requirements:**

See Section F, Conditions 5, 6, 7, and 8.

7. Specific Control Equipment Operating Conditions:

NA

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>37</u> of <u>50</u>

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary. The facility shall monitor and record the amount of lighter fluid processed in the lighter fluid bottling line production on a monthly basis.

| | <u>Description</u> | Generally Applicable Regulation |
|-----|----------------------------------|---------------------------------|
| 1. | Dryer Bypass Bunker | NA |
| 2. | Dryer Bypass Bunker Management | NA |
| 3. | Coal Unloading Point #1 (North) | NA |
| 4. | Coal Unloading Point #2 (South) | NA |
| 5. | Screener | NA |
| 6. | Borax Dump Station | NA |
| 7. | Briquet #1 Belt Loading | 401 KAR 63:010 |
| 8. | Char/Rerun Bunker #1 Loading | 401 KAR 63:010 |
| 9. | Char/Rerun Bunker #2 Loading | 401 KAR 63:010 |
| 10. | Hopper #1 Loading | 401 KAR 63:010 |
| 11. | Hopper #2 Loading | 401 KAR 63:010 |
| 12. | Hopper #3 Loading | 401 KAR 63:010 |
| 13. | Hopper #4 Loading | 401 KAR 63:010 |
| 14. | Hopper #5 Loading | 401 KAR 63:010 |
| 15. | Dock Collection Belt Transfer | 401 KAR 63:010 |
| 16. | Lime Bunker Loading | 401 KAR 63:010 |
| 17. | Nitrate Dump Station | NA |
| 18. | Raw Material Mgmt (Char) | 401 KAR 63:010 |
| 19. | Raw Material Mgmt (Lime) | 401 KAR 63:010 |
| 20. | Raw Material Mgmt (Rerun) | 401 KAR 63:010 |
| 21. | Pkg Silo Bypass Bunker | NA |
| 22. | Pkg Silo Bypass Bunker Mgmt | NA |
| 23. | #1 Belt to Screen | 401 KAR 63:010 |
| 24. | Bypass Belt to Sawdust Pile | 401 KAR 63:010 |
| 25. | Bypass Bunker Loading | 401 KAR 63:010 |
| 26. | Char Bypass Bunker Mgmt (Loader) | NA |
| 27. | Ohmart Cal Port (Char Chute) | NA |
| 28. | Ohmart Cal Port (Wood Chute) | NA |
| 29. | Pond Mud Pile Mgmt | NA |
| 30. | Pond Mud Pile (Wind Erosion) | NA |
| 31. | Reversing Belt to Bypass Belt | 401 KAR 63:010 |
| 32. | 2 Wood Hammermills | 401 KAR 63:010 |
| 33. | Char Truck Dump | NA |
| 34. | A Dryer Feed Belt | 401 KAR 63:010 |
| 35. | A-B Transfer Belt | 401 KAR 63:010 |

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>38</u> of <u>50</u>

36. B Dryer Fines DischargeNA37. B Dryer Fines DischargeNA

38. B Dryer Oscillator 401 KAR 63:010

SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)

Description Generally Applicable Regulation

| Description | | Generally Applicable Regulation | | |
|-------------|--------------------------------------|---------------------------------|--|--|
| 39. | B-C Transfer Belt | 401 KAR 63:010 | | |
| 40. | Briquet Bypass Bunker | NA | | |
| 41. | Briquet Bypass Bunker Management | NA | | |
| 42. | C Dryer Feed Belt | 401 KAR 63:010 | | |
| 43. | C Dryer Fines Discharge | NA | | |
| 44. | C Dryer Oscillator | 401 KAR 63:010 | | |
| 45. | C Dryer Transfer Chute to Oscillator | NA | | |
| 46. | Green End Shaker | 401 KAR 63:010 | | |
| 47. | Green Fines Collection Bunker | NA | | |
| 48. | Green Fines Collection Bunker Mgmt | NA | | |
| 49. | Press Discharge Belt | 401 KAR 63:010 | | |
| 50. | Transfer Chute to Dryer Oscillator | NA | | |
| 51. | Briquet Building Exhaust Fan #1 | NA | | |
| 52. | Briquet Building Exhaust Fan #2 | NA | | |
| 53. | Briquet Building Exhaust Fan #3 | NA | | |
| 54. | Briquet Building Wall Fan | NA | | |
| 55. | Exhaust Fan Vent #1 - East Wall | NA | | |
| 56. | Exhaust Fan Vent #1 - North Wall | NA | | |
| 57. | Exhaust Fan Vent #1 - West Wall | NA | | |
| 58. | Exhaust Fan Vent #2 - East Wall | NA | | |
| 59. | Exhaust Fan Vent #2 - North Wall | NA | | |
| 60. | Exhaust Fan Vent #2 - West Wall | NA | | |
| 61. | Exhaust Fan Vent #3 - East Wall | NA | | |
| 62. | Exhaust Fan Vent #3 - North Wall | NA | | |
| 63. | Exhaust Fan Vent #3 - West Wall | NA | | |
| 64. | Pkg Bldg Exhaust Vent #1 | NA | | |
| 65. | Pkg. Bldg. Exhaust Vent #2 | NA | | |
| 66. | A Dryer Reversing Belt | 401 KAR 63:010 | | |
| 67. | A Dryer Transfer Belt | 401 KAR 63:010 | | |
| 68. | A-B Dryer Transfer to Elevator Belt | 401 KAR 63:010 | | |
| 69. | C Dryer Reversing Belt | 401 KAR 63:010 | | |
| 70. | C Dryer Transfer Belt | 401 KAR 63:010 | | |
| 71. | Dryer A, B & C Discharge Drop Pt. | NA | | |
| 72. | Dryer Discharge Belt #1 | 401 KAR 63:010 | | |
| 73. | Dryer Discharge Belt #2 | 401 KAR 63:010 | | |
| 74. | Pour Back Hopper | NA | | |
| 75. | Pour Back Hopper @Bypass Bunker | NA | | |
| 76. | Pkg Silo #1 Drop Point | NA | | |
| | | | | |

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>39</u> of <u>50</u>

- 77. Pkg Silo #2 Drop Point NA
- 78. Pkg Silo #3 Drop Point NA
- 79. Boiler Fuel Oil Storage Tank Vent NA
- 80. Diesel Fuel Tank Vent NA
- 81. Waste Lubrication Oil Tank Vent NA
- 82. Gas Tank Vent #1 NA

SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)

Description Generally Applicable Regulation Kerosene Tank Vent #1 83. NA 84. Fan Vent NA 85. Aeration Blower Vent #1 NA 86. Aeration Blower Vent #2 NA 87. **Emergency Generator Exhaust** NA 88. Emergency Fire Fighting Water Pump NA Manufacturing Building (wet collector) 401 KAR 59:010 89. 90. Manufacturing Building (wet collector) 401 KAR 59:010 91. Packaging Chemical Usage NA 92. Ink Jet Printer Ink Usage NA 93. Hot Melt Adhesive Usage NA 94. Borax Use Tank NA 95. Coal Blower Hold Tank NA 96. Nitrate Use Tank NA 97. Borax Bag Dump NA 98. Storage Silos #1, #2 and #3 NA 99. Storage Silo #4 NA 100. Storage Silo #5 NA 101. Storage Silo #6 and #7 NA 102. Storage Silo #8 NA 103. Sawdust Holding Tank NA 104. Storage Silo #9 NA 105. Storage Silo #10 NA 106. Storage Silo #11 NA 107. Storage Silo #12 NA 108. Coal Use Tank NA 109. Coal Storage Shed NA 110. Dry Wood Feed System 401 KAR 59:010 111. Central Vacuum System NA Wood/Lime Hammermill 112. 401 KAR 63:010 113. Wood Metering and Sizing NA 114. Lime Truck Unloading (enclosed) NA 115. Lime Sizing and Metering (enclosed) NA 116. Wood/Lime Handling NA

NA

Lignite Metering

117.

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>40</u> of <u>50</u>

| 110 | T !!/- T L.11! | NT A |
|------|-------------------|------|
| 118. | Lignite Unloading | INA |

119. Sawdust Truck Dump 401 KAR 63:010

120. Nitrate Day Bin
121. Nitrate Tank
122. Lime Tank
NA

SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)

<u>Description</u> <u>Generally Applicable Regulation</u>

Lighter Fluid Bottling Line (6.0 million gallons per year)

| 123. | Filling Operations | NA |
|------|--------------------------|----|
| 124. | Filler Surge Tank | NA |
| 125. | Spill Evaporative Losses | NA |

Lighter Fluid Bottling and Solvent Treated Briquets (12.63 million gallons per year)

| 126. | Tank Car Surge Tank | NA |
|------|----------------------------|----|
| 127. | Solvent Handling Equipment | NA |
| 128. | Railcar Solvent Unloading | NA |

Miscellaneous

| 129. | Dual Fuel-fired burner in ACC | NA | |
|------|------------------------------------|----|----|
| 130. | Dry Heat Burner | | NA |
| 131. | Furnace Start-up Burners | | NA |
| 132. | Miscellaneous Packaging Operations | | NA |
| | (Gluing, ink-jet printing) | | |
| 133. | Carbonaceous material storage silo | | NA |

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>41</u> of <u>50</u>

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

- 1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in V-03-018 R1, shall be based on emissions and processing rates for any twelve (12) consecutive months.
- 2. Particulate PM/PM₁₀, sulfur dioxide, and volatile organic compound emissions as measured by methods referenced in 401 KAR 50:015, Section 1 and/or this permit, shall not exceed the limitations specified herein.
- 3. Pursuant to 401 KAR 51:017, total volatile organic compound emissions from emissions units 07, 08, and 09 shall not exceed 51.9 lbs/hour averaged on a daily basis and 169.3 tons in any consecutive twelve months period.

The permittee may assure compliance with this emission limitation by demonstrating compliance with the solvent usages rate as mentioned in Subsection 1, Operating Limitations for Emissions Unit 37 of Section B.

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>42</u> of <u>50</u>

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>43</u> of <u>50</u>

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

- 1. Pursuant to Section 1b (IV)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
 - a. Date, place as defined in this permit, and time of sampling or measurements;
 - b. Analyses performance dates;
 - c. Company or entity that performed analyses;
 - d. Analytical techniques or methods used;
 - e. Analyses results; and
 - f. Operating conditions during time of sampling or measurement.
- 2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b(IV) 2 and 1a(8) of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
 - b. To access and copy any records required by the permit:
 - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

- 4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
- 5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Section 1b (V)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>44</u> of <u>50</u>

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. All deviations from permit requirements shall be clearly identified in the reports.

- 7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall submit written notice upon request.
- 8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Regional Office listed on the front of this permit within 30 *days*. Other deviations from permit requirements shall be included in the semiannual report required by Section F.6 [Section 1b (V) 3, 4. of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
 - a. Identification of the term or condition:
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period.
 - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>45</u> of <u>50</u>

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality

London Regional Office

875 S. Main Street

London Regional Office

Air Enforcement Branch
Atlanta Federal Center

London, KY 40741 61 Forsyth St.

Atlanta, GA 30303-8960

Division for Air Quality Central Files 803 Schenkel Lane Frankfort, KY 40601

- 10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.
- 11. Pursuant to Section VII (3) of the policy manual of the Division for Air Quality as referenced in 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days after the completion of the fieldwork.

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>46</u> of <u>50</u>

SECTION G - GENERAL PROVISIONS

(a) <u>General Compliance Requirements</u>

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 and of the Clean Air Act and is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a, 3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].

- 2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a, 6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
 - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
 - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

- 4. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the conditions of this permit [Section 1a, 7,8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>47</u> of <u>50</u>

SECTION G - GENERAL PROVISIONS (CONTINUED)

6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a, 14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

- 7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a, 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Section 1a, 15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a, 10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)(b)].
- 11. This permit does not convey property rights or exclusive privileges [Section 1a, 9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection or any other federal, state, or local agency.
- 13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)(d)].
- 14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)(a)].
- 15. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic minor source preconstruction permit terms and conditions for various emission units and incorporates all

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>48</u> of <u>50</u>

requirements of those existing permits into one single permit for this source.

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>49</u> of <u>50</u>

SECTION G - GENERAL PROVISIONS (CONTINUED)

16. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of issuance. Compliance with the conditions of a permit shall be considered compliance with:

- (a) Applicable requirements that are included and specifically identified in the permit and
- (b) Non-applicable requirements expressly identified in this permit.

(b) Permit Expiration and Reapplication Requirements

- 1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].
- 2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

(c) Permit Revisions

- 1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
- 2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.
- (d) <u>Construction, Start-Up, and Initial Compliance Demonstration Requirements</u>

The following units will be modified, replaced, or are proposed new units:

Emission Unit EU-01 Wood receipt and storage;

Emission Unit EU-02 Wood Dryer and Retort Furnace with After Combustion Chamber;

Emission Unit EU-07 Briquet Dryer A; and

Emission Unit EU-38 Briquet Cooler A

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>50</u> of <u>50</u>

SECTION G - GENERAL PROVISIONS (CONTINUED)

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein, emission units EU-01, EU-02, EU-07, and EU-38 in accordance with the terms and conditions of this permit.

- 1. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
- 2. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
 - a. The date when construction commenced.
 - b. The date of start-up of the affected facilities listed in this permit.
 - c. The date when the maximum production rate specified in the permit application was achieved.
- 3. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.
- 4. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the proposed permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.
- 5. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration (test) on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. These performance tests must also be conducted in accordance with General Provisions G(d)7 of this permit and the permittee must furnish to the Division for Air Quality's Frankfort Central Office a written report of the results of such performance test
- 6. Terms and conditions in this permit established pursuant to the construction authority of 401KAR 51:017 or 401 KAR 51:052 shall not expire.

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>51</u> of <u>50</u>

SECTION G - GENERAL PROVISIONS (CONTINUED)

7. Pursuant to Section VII 2.(1) of the policy manual of the Division for Air Quality as referenced by 401 KAR 50:016, Section 1.(1), at least one month prior to the date of the required performance test, the permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) to the Division's Frankfort Central Office. Pursuant to 401 KAR 50:045, Section 5, the Division shall be notified of the actual test date at least ten (10) days prior to the test.

- 8. Pursuant to Section VII 1.(2 and 3) of the policy manual of the Division for Air Quality as referenced by 401 KAR 50:016, Section 1.(1), if a demonstration of compliance, through performance testing was made at a production rate less than the maximum specified in the application form, then the permittee is only authorized to operate at a rate that is not greater than 110% of the rate demonstrated during performance testing. If and when the facility is capable of operation at the rate specified in the application, compliance must be demonstrated at the new production rate if required by the Division.
- (e) <u>Acid Rain Program Requirements</u> No Acid Rain authorized by this permit
- (f) <u>Emergency Provisions</u>
- 1. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
 - a. An emergency occurred and the permittee can identify the cause of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - d. Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
 - e. This requirement does not relieve the source of other local, state or federal notification requirements.
- 2. Emergency conditions listed in General Condition (e)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].
- 3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>52</u> of <u>50</u>

SECTION G - GENERAL PROVISIONS (CONTINUED)

(g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center P.O. Box 3346 Merrifield, VA, 22116-3346

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

(h) Ozone depleting substances

- 1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.

(i) Ozone depleting substances (Continued)

- d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
- e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
- f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- 2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

Permit Number: <u>V-03-018 (Revision 1)</u> **Page:** <u>53</u> of <u>50</u>

SECTION H - ALTERNATE OPERATING SCENARIOS

None

SECTION I - COMPLIANCE SCHEDULE

None